Recombinant Human Hemopexin/HPX Protein (His Tag)

Catalog Number: PKSH031380

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

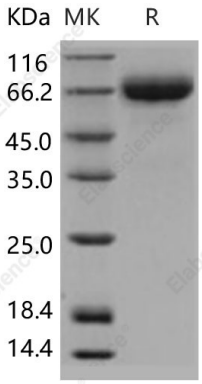
Description

Species	Human
Source	HEK293 Cells-derived Human Hemopexin/HPX protein Met 1-His 462, with an C-terminal His
Calculated MW	50.7 kDa
Observed MW	70-75 kDa
Accession	NP_000604.1
Bio-activity	Measured by its ability to bind protoporphyrin IX (PPPIX). Recombinant human Hemopexin binds > 10 μM PPPIX, resulting in a 50% decrease in the fluorescence signal of human Hemopexin.

Properties

Purity	> 96% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

Background

Hemopexin (HPX) is plasma glycoprotein belongs to the family of the acute-phase proteins whose synthesis is induced after an inflammatory event. Hemopexin with two four-bladed beta -propeller folds has been found in other proteins including collagenases and provides sites for protein-protein interactions. The liver is the major synthesizing organ. Hemopexin participates in maintaining and recycling the iron pool by utilizing its high binding affinity toward heme composed of protoporphyrin IX and iron. It also functions in preventing oxidation caused by heme after hemolysis. Hydrophobic heme molecules can intercalate into lipid membranes and participate in the oxidation of lipid membrane components through the Fenton reaction resulting in lipid peroxidation. Hemopexin undergoes a conformational change upon the binding of heme. The conformational change allows hemopexin to interact with a specific receptor, forming a complex which is then internalized. Heme concentrations in plasma increase after hemolysis, which is associated with several pathological conditions such as reperfusion injury and ischemia.

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